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David D. Donovan, Direct Testimony Docket No. 4220-UR-117 Exhibit No. 1.14 (DDD-1)

Page 1 of 12

NORTHERN STATES POWER COMPANY WISCONSIN

REVISION: 3

SHEET NO. E 54.2

SCHEDULE Art-1

WISCONSIN ELECTRIC RATE BOOK

VOLUME NO. 7

AMENDMENT NO. XXX

### **Experimental Advanced Renewable Energy Purchase Service**

Effective In All territories served by the Company.

#### Definition:

<u>Distributed generation facilities</u> are electricity generators owned by the customer, located close to the point of energy consumption, and small in scale, usually no more than <u>the existing load of the customer</u>.

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Availability The advanced renewable energy tariff is available to <a href="retail">retail</a> customers who would own small distributed generation facilities that are powered by a renewable resource and placed in initial service after January 1, 2005. Electric providers are not allowed to own a majority share of the projects that participate in the tariff. Small renewable distributed generators may sign up for this tariff until the tariff has been fully subscribed or the capacity for a specific technology has been reached as determined by the caps described below.

#### Size

The minimum size project per customer is 20 kW. The maximum size project per customer is:

•	Anaerobic Digestion:	Deleted: Biomass/Biogas
	• Tier 1: ,800 kW	Formatted: Tabs: 2.13", Left
	• Tier 2: 2 MW	Formatted: Bullets and Numbering
	<ul> <li>Tier 3 5 MW (Community-Based Project Only)</li> </ul>	Deleted: :
•	Wind:	
	• Tier 1: 100 kw	Formatted: Tabs: 2.13", Left
	• Tier 2: 2 MW	Formatted: Bullets and Numbering
	• Tier 3: 5 MW (Community-Based Project Only)1 MW	Deleted:
•	Solar: 10 kW	
	Community Bosed Project: 5 MW	Formatted: Bullets and Numbering

## Environmental and Renewable Energy Credits

The electric provider retains the rights and ownership to any environmental credits (including any RECs, methane offsets, carbon credits, etc.) generated under this tariff.

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resources defined in 196.378 (1)(h) WI
Stats with the exclusion of ¶
any refuse-derived fuel: 1 MW¶

### Program Subscription Limits

The Company offers the advanced renewable energy tariff to <u>retail</u> customers, beginning at the effective date of the tariff, until fully subscribed. A fully subscribed tariff offering will be reached when small, renewable distributed generation accounts for one-quarter percent (0.25%) of the electric providers retail electricity sales (in megawatt-hours) for <u>2009</u> as <u>submitted</u> in the <u>Company's FERC Form 1 filing</u>.

Technology Limit

The solar technology category will be fully subscribed when 300 kW of capacity has been subscribed.

Community-Based Limits

The Community-Based Project Category is only applicable to the Anerobic Disgester and Wind technology cateogories. In addition, the Community-Based Category is applicable only to local units of government (Village, City, Towns, or Counties), or to existing retail customers that choose to join together to develop a joint project.

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Deleted: the previous calendar year.

**Deleted:** Retail electricity sales will be based on 2005 Energy Information Administration statistics.

Connection
Generation facilities must meet the interconnection requirements of the "Rules for Interconnecting Distributed Generation Facilities" (PSC 119). Interconnection of the generator will be at distribution voltage only (less than 50 kV). Customer systems shall be also be connected in accordance with all PSCW and Company requirements.

(continued)

ISSUED:

EFFECTIVE: For service rendered on and after PSCW AUTHORIZATION: Order in Docket No. 4220-UR-117 dated

David D. Donovan, Direct Testimony

Docket No. 4220-UR-117 Exhibit No. 1.14 (DDD-1)

Page 3 of 12



REVISION: 3

SHEET NO. E 54.3

SCHEDULE Art-2

VOLUME NO. 7

AMENDMENT NO. 723

### Experimental Advanced Renewable Energy Purchase Service (continued) Pricing

The advanced renewable energy tariff pricing is structured as a fixed payment for all electrical output. The price paid for renewable generation under the advanced renewable energy tariff is based on or near production costs associated with each renewable energy technology covered by this tariff, Customers operating renewable systems shall be paid at the rates shown below for 100% of the generator output, regardless of customer usage or base rate applicability:

The prices for renewable resources offered under the advanced renewable energy tariff are as follows:

•	Anaerobic Digestion Energy Systems (The payment rate for biogas energy systems taking
	service under this tariff and properly connected to the utility distribution system is as
	follows);

per kWh

Tier 2: per kWh

Tier 3 (Community-Based Projects Only): per kWh

Wind Energy Systems (The payment rate for wind energy systems taking service under this tariff and properly connected to the utility distribution system is as follows):

o Tier 1: per kWh

per kWh Tier 2:

Tier 3 (Community-Based Projects Only): per kWh

Solar Energy Systems (The payment rate for solar energy systems taking service under this tariff and properly connected to the utility distribution system is as follows);

o per kWh

Community-Based Energy Systems (The payment rate for community-based energy systems taking service under this tariff and properly connected to the utility distribution system is as follows):

o per kWh

Tariff Period Length and Guaranteed Payment Rate

The effective term for an advanced renewable energy payment rate is ten (10) years from the effective date of the contract. Once established on the effective date of the contract, the payment rate under this tariff is constant over the ten year period.

At the end of the 10 year period, no other payment program is available, the generator will be paid the standard "avoided cost" default buy-back period for generators as defined by existing utility tariffs.

#### Tariff Escalation

No adjustments to the advanced renewable energy tariff will be made based on cost or fuel cost escalation.

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Deleted: Biogas Energy Systems [ The payment rate for biogas energy systems taking service under this tariff and properly connected to the utility distribution system is as follows: ¶ \$0.0730 per kWh ¶

Other Renewable

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Deleted: For all other customer-sited renewable energy systems using technologies that have been determined by the PSCW pursuant to Wisconsin Act 141 to comply with the Wisconsin Renewable Portfolio Standard, any such qualified renewable energy systems taking service under this tariff and properly connected to the utility distribution system shall be negotiated with the electric provider on a case-bycase basis.¶

(continued)

ISSUED:

EFFECTIVE: For service rendered on and after PSCW AUTHORIZATION: Order in Docket No. 4220-UR-117

Page 5 of 12



**REVISION:** 

SHEET NO. E 55

SCHEDULE Pg-1

VOLUME NO. 7

AMENDMENT NO. XXX

# PARALLEL GENERATION - NET ENERGY BILLING SERVICE

Effective In All territories served by the Company.

	* * *		
genera	Availability Available to any retail electric customer with customer owned renewable resource generation of 100 kW or less for purpose of operating generation interconnected with Company's system, where customer's delivery offsets retail electric consumption at the same site. If a customer has more than one electric generator, the generators' ratings shall be summed and the sum may not		
	1 100 kW.	R	
solar p that m Renev	vable resource generators include generating systems which exclusively utilize wind, photovoltaic, wood or wood waste, refuse derived fuel, biogas, or hydro-electric generators must meet the renewable resource definition contained in Wisconsin Statute 196.378. wable resource generation equipment must be located on the customer's premises serving only stomer's premises.	N N N N N	
Month	ly Energy Credit	R	
1)	A retail electric customer generating power with renewable resource facilities shall be	Ñ	
<del>-</del>	billed monthly on a net energy basis. The retail electric customer may offset electricity	N	
	usage at the same site each month on a net energy basis.	Ņ	
(2)	Customer will receive credit for energy delivered each month in excess of the amount used	N	
	that month. The credit will be given at the Pg-2A service rate and applied to the customer's account for retail service at the same site. If Customer receives retail service on a non-tou	N N	
	basis, then excess generation shall be compensated at the Pg-2A service using the weighted	N.	
	average of 34.8% of the on-peak Pg-2A rate and 65.2% of the off-peak Pg-2A rate.	N	
3)	If in any month, the customer's bill has a credit balance of \$25 or less as determined using the net energy billing method, the amount shall be credited to a subsequent bill until a debit balance is reestablished.	M M M	
	al Rules	'nΤ	
1)	The customer's generation facility shall be permanently connected to only those facilities receiving service under schedules with similar rate designs. Customer shall not switch the	N N	
	generation between two or more rate schedules. This tariff applies only to the energy	N	
	generated by customer's renewable resource generation facilities.	N	
2)	Customer shall retain all renewable credits and other attributes associated with the energy	N	
	provided to the Company pursuant to this tariff.	N	
3)	NSPW will continue to purchase excess generation from customers who have initiated	N	
•	service under the Pg-1 tariff prior to January 1, 2012, and who have generation with name	N	
	plate capacity of 20kW or less until the Commission issues its order in the Company's next general rate case.	N N	
	general rate ease.	-,	

ISSUED: January xx, xxxx

EFFECTIVE: For service rendered on and after January xx, xxxx

Page 6 of 12

NORTHERN STATES POWER COMPANY WISCONSIN WISCONSIN ELECTRIC RATE BOOK

**REVISION:** 7 SHEET NO. E 55.1

SCHEDULE Pg-1.1

VOLUME NO. 7

AMENDMENT NO. xxx

PARALLEL GENERATION - NET ENERGY BILLING SERVICE (cont'd)

Parallel Generation – non-renewable resource purchase service Pg-1.1 formerly listed under items 2) and 3) is cancelled.

D

Energy Cost Adjustment Energy Payments based on retail energy rates are subject to the adjustment provided for in Energy Cost Adjustment. See Schedule X-1, Sheet No. E 63.

Late Payment Charge A one percent (1%) per month late payment charge will be applied to outstanding charges unpaid 20 days after the date of billing.

Terms and Conditions of Service See Schedule PG-3.

ISSUED: xxxx xx, xxxx

EFFECTIVE: For service rendered on and after xxxx xx, xxxx.

Page 7 of 12



REVISION:

SHEET NO. E 56

SCHEDULE Pg-2

WISCONSIN ELECTRIC RATE BOOK

VOLUME NO. 7

AMENDMENT NO. xxx

# PARALLEL GENERATION - ENERGY PURCHASE SERVICE-(cancelled)

D

Pg-2 service has been cancelled and is replaced by Pg-2A or Pg-2B or Pg-2C services. Please refer to the appropriate tariff sheet for the applicable replacement service as follows:

Replacement Pg-2 service	Generator Size	Type of Pricing
Pg-2A	2,000 kW or less	Historical Average LMP
Pg-2B	5,000 kW or less	Day Ahead LMP
Pg-2C	20,000 kW or less	Negotiated Purchase

NORTHERN STATES POWER COMPANY WISCONSIN ELECTRIC RATE BOOK

REVISION: 0

SHEET NO. E 56.4

SCHEDULE Pg-2A

VOLUME NO. 7

AMENDMENT NO. xxx

## PARALLEL GENERATION - ENERGY PURCHASE SERVICE

Effective In All territories served by the Company.

<u>Availability</u> Available to any retail electric customer with generation certified as a "qualifying facility" under Part 292 of the Federal Energy Regulatory Commission's regulations under the Public Utility Regulatory Policies Act of 1978, rated 2,000 kW or less for purpose of operating generation interconnected with Company's system, where customer's delivery is purchased by Company.

<u>Rate</u> Customer shall receive monthly payment for all electricity delivered to Company and shall be billed by Company for metering and associated billing expenses as presented below.

Customer Charge

Generators rated from 21 kW to 100 kW delivering at less than 200 amps.

\$ 6.50/mo.

Generators rated from 21 kW to 100 kW delivering more than 200 amps.

\$ 8.60/mo.

Generators rated at more than 100 kW

\$ 14.86/mo.

### Energy Credit for Deliveries to Company

On-Peak Energy Credit Rate: For 2012 rates, the on-peak energy credit rate shall be equal to the average of the on-peak Day Ahead Locational Marginal Prices ("DA LMP") at the NSP.NSP load zone node for the previous year November 1, 2010 to October 31, 2011. The rates shall be reset annually on January 1 of each year based on the hourly average on-peak DA LMP at the NSP.NSP load zone node of the most recently completed November 1 to October 31 period. The on-peak credit rate for 2012 is \$ 0.0xxxx per kWh.

Off-Peak Energy Credit Rate: For 2012 rates, the on-peak energy credit rate shall be equal to the average of the off-peak Day Ahead Locational Marginal Prices ("DA LMP") at the NSP.NSP load zone node for the previous year November 2010 to October 2011. The rates shall be reset annually on January 1 of each year based on the hourly average off-peak DA LMP at the NSP.NSP load zone node of the most recently completed November 1 to October 31 period. The off-peak credit rate for 2012 is \$ 0.0xxxx per kWh.

<u>Definition of Peak Periods</u> Unless specified to the contrary in writing by the Company to any customers using this schedule and refilling this rate sheet not later than November 1 of each year, on-peak hours shall be from 9:00 a.m. to 9:00 p.m. Monday through Friday, inclusive (excluding holidays), for the 12 months beginning with the first full billing period following December 15. The holidays designated shall be New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas, on the day nationally designated to be celebrated as such. When a designated holiday occurs on Saturday, the preceding Friday will be considered an off-peak day. When a designated holiday occurs on a Sunday, the following Monday will be considered an off-peak day. Off-peak hours are times not specified as on-peak hours.

ISSUED: xxxx xx, xxxx

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Page 9 of 12



REVISION:

SHEET NO. E 56.5

SCHEDULE Pg-2A

VOLUME NO. 7

AMENDMENT NO. xxx

## PARALLEL GENERATION - ENERGY PURCHASE SERVICE(cont'd)

<u>Energy Loss Factors</u>: The following loss factors shall be applied to the on-peak and off-peak energy credit rates and capacity payments to reflect Company system losses:

Customers Generation metered at Transmission (transformed);

1.05116

Customers Generation metered at Primary;

1.09577

Customers Generation metered at Secondary;

1.06481

<u>Capacity Payment</u>: Should the Midwest Independent Transmission System Operator ("MISO") implement a capacity market, a capacity credit shall be implemented reflecting the MISO capacity market pricing method.

Renewable Premium: At the Company's sole discretion, a premium to be paid on a per kWh basis maybe applied to generators that generate a renewable credit that is transferred to the Company. Customers retain the right to refuse a renewable premium and keep the renewable credits or tags. Premiums could be set when the contract is signed.

Terms and Conditions of Service See Schedule PG-3.

<u>Late Payment Charge</u> A one percent (1%) per month late payment charge will be applied to outstanding charges unpaid 20 days after the date of billing.

ISSUED: xxxx xx, xxxx

EFFECTIVE: For service rendered on and after xxxx xx, xxxx.

Page 10 of 12



REVISION: 0

SHEET NO. E 56.6

SCHEDULE Pg-2B

VOLUME NO. 7

AMENDMENT NO. xxx

# PARALLEL GENERATION - ENERGY PURCHASE SERVICE - LMP

Effective In All territories served by the Company.

<u>Availability</u> Available to any retail electric customer with generation certified as a "qualifying facility" under Part 292 of the Federal Energy Regulatory Commission's regulations under the Public Utility Regulatory Policies Act of 1978, rated 5,000 kW or less for purpose of operating generation interconnected with Company's system, where customer's delivery is purchased by Company. Customers with generating capacity of 2,000 kW or less have the option of selling energy to the Company under this Pg-2B tariff or the Pg-2A tariff.

The existing Pg-2A customers desiring to change to the Pg-2B tariff can do so only in the beginning of the next calendar year and must stay on the new rate for at least one full calendar year. Similarly, the existing Pg-2B customers of 2,000 kW or less desiring to change to the Pg-2A tariff can only change in the beginning of the next calendar year and must stay on the new rates for at least one full calendar year. This transition between these two tariffs can occur only at the beginning of the calendar year.

Rates Customer shall receive monthly payment for all electricity delivered to Company and shall be billed by Company for metering and associated billing expenses as presented below.

Customer Charge

\$ 14.80/mo.

Energy Credit for Deliveries to Company

The customer shall be compensated a the hourly Day Ahead Locational Marginal Prices ("DA LMP") at the NSP.NSP load zone node espressed in \$/kWh.

<u>Capacity Payment</u> Should the Midwest Independent Transmission System Operator ("MISO") implement a capacity market, a capacity credit shall be implemented reflecting the MISO capacity market pricing method.

<u>Energy Loss Factors</u> The following loss factors shall be applied to the on-peak and off-peak energy credit rates and capacity payments to reflect Company system losses:

Customers Generation metered at Transmission (transformed); 1.05116 Customers Generation metered at Primary; 1.09577 Customers Generation metered at Secondary; 1.06481

Renewable Premium: At the Company's sole discretion, a premium to be paid on a per kWh basis maybe applied to generators that generate a renewable credit that is transferred to the Company. Customers retain the right to refuse a renewable premium and keep the renewable credits or tags. Premiums could be set when the contract is signed.

Terms and Conditions of Service See Schedule PG-3.

<u>Late Payment Charge</u> A one percent (1%) per month late payment charge will be applied to outstanding charges unpaid 20 days after the date of billing.

ISSUED: xxxx xx, xxxx

EFFECTIVE: For service rendered on and after xxxx xx, xxxx.

Exhibit No. 1.14 (DDD-1)

Page 11 of 12



REVISION:

SHEET NO. E 56.7

SCHEDULE Pg-2C

VOLUME NO. 7

AMENDMENT NO. xxx

# PARALLEL GENERATION - ENERGY PURCHASE SERVICE-NEGOTIATED

Effective In All territories served by the Company.

Availability Available to any retail electric customer with generation certified as a "qualifying facility" under Part 292 of the Federal Energy Regulatory Commission's regulations under the Public Utility Regulatory Policies Act of 1978, rated 20,000 kW or less for purpose of operating generation interconnected with Company's system, where customer's delivery is purchased by Company. Customers with generating capacity of 5,000 kW or less have the option of selling energy to the Company under this Pg-2C tariff or the Pg-2B (LMP) tariff.

<u>Negotiated Rates</u> Company and prospective parallel generation customers are required to adhere to the interconnection rules and guidelines set out in PSC 119. Notwithstanding those guidelines, parallel generation customers have the right to request negotiated buy back rates. The following are the required procedural guidelines for negotiation of buy back rates to apply to customer's generation output:.

- 1. Except as allowed by Paragreph 3 below, the Company must respond to the customer within 30days of initial receipt of the customer's written proposal, and within 30 days of receipt of any customer's subsequent written proposal.
- 2. The Company's ersponse may either accept or reject customer's proposal. Compay's rejection of customer's proposal must be accompanied by a counter offer relating to the specifics of the customer's written proposal; except
- 3. If Company is unable to respond to the customer's written proposal within 30 days it shall inform the customer of:
  - a. Specific information needed to evaluate the customerowned generation system proposal.
  - b. The precise difficulty encountered in evaluating the customerowned generating system written proposal.
  - c. The estimated date that the company will repond to the customer's written proposal.
- 4. The commission may become involved in the Company and customer negotiations upon a showing by either the Company or the Customer that a reasonable conclusion cannot be reached under the above guidelines. The commission may provide a waiver to the guidelines and order new negotiation requirements so that a reasonable conclusion can be reached.

Renewable Premium: At the Company's sole discretion, a premium to be paid on a per kWh basis maybe applied to generators that generate a renewable credit that is transferred to the Company. Customers retain the right to refuse a renewable premium and keep the renewable credits or tags. Premiums could be set when the contract is signed.

Terms and Conditions of Service See Schedule PG-3.

ISSUED: xxxx xx, xxxx

EFFECTIVE: For service rendered on and after xxxx xx, xxxx.

Page 12 of 12

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**REVISION:** 

SHEET NO. E 57

SCHEDULE Pg-3

VOLUME NO. 7

1

AMENDMENT NO. xxx

# PARALLEL GENERATION - TERMS AND CONDITIONS OF SERVICE

## Terms and Conditions of Service

- The Company shall install appropriate metering facilities to record all flows of energy necessary to bill in accordance with the charges and credits of this rate schedule.
- The customer shall furnish, install and wire the necessary service entrance equipment, meter 2. sockets, meter enclosure cabinets, or meter connection cabinets that may be required by the Company to properly meter usage and sales to the Company.
- Company shall install the necessary facilities and equipment to accommodate customer's generation output associated with this service. At the customer's option, either the Company or customer will bear the installation cost. However, if installation is made at Company's expense, customer must reimburse the Company the full installed cost, including any financing costs, over a period not to exceed two years.
- To interconnect, customer's generation must be installed, connected and operated in 4. compliance with existing codes and Company's PARALLEL GENERATION - GENERAL RULES as shown in Schedules PGX-1 to PGX-1.2, which were established in accordance with Docket No. 01-AC-48, and the rules provided in PSC-119.
- Customer must maintain and provide certification either of financial responsibility in R 5. accordance with PSC-119 covering the operation of customer's generation equipment and its R output.

ISSUED: xxxx xx,xxxx

EFFECTIVE: For service rendered on and after xxxx xx,xxxx